
Performing acceptance tests

Perform the following acceptance tests after the system loading is completed:

- Module power supply test
- Blower unit and thermal sensor test
- Sysload test
- System terminal and system monitor test
- PFTU test (if PFTUs are equipped)
- Disk drive unit test

See the *X11 input/output guide* for a detailed explanation of software prompts and the *X11 system messages guide* for the meaning of system messages and display codes generated during acceptance tests.

Note: While performing the tests below, if you fail to see an expected display code, contact your Northern Telecom support representative for assistance.

Module power supply test

Use this procedure to test module power supplies and ringing generators and their interface to the system monitor. This procedure should be performed for each power supply at system installation, or whenever a module is installed.

Performing these tests on a single CPU system may cause a sysload.

Performing these tests on a dual CPU system may cause an initialization; disregard INI messages during the tests.

- 1 Verify that the green LED on each power supply is lit and that each red column LED is OFF.
- 2 Set the power supply to OFF. If there is an MPDU in the module, use the associated circuit breaker on the MPDU. If there is a switch on the power supply, use the switch.
 - The green LED on the power supply should go out.
 - The red column LED should light.
 - The system terminal should display PWR0002 and BSD090.

Note: If the power supply is in an IPE Module, XMI messages may be generated.

 - The system terminal should then display BSD000.
- 3 Set the power supply to ON.
 - The green LED on the power supply should light.
 - The red column LED should go out.
 - The system terminal should display PWR0000.
- 4 Set the power supply to OFF. Wait until the red column LED lights, then unseat the power supply.
 - The red column LED should remain lit.
 - The system terminal should display PWR0002, BSD090, BSD000, and PWR0003.
- 5 Make sure the power supply switch is OFF and then push it back into the slot. Set the power supply to ON.
 - The green LED on the power supply should light.
 - The red column LED should go out.
 - The system terminal should display PWR0000.

Blower unit and thermal sensor test

Use this procedure to test the NT8D52 Blower Unit and its interface to the system monitor. This test should be performed on the blower unit when a column is initially installed.

Note: In the steps below, if you fail to see an expected display code, contact your Northern Telecom support representative.

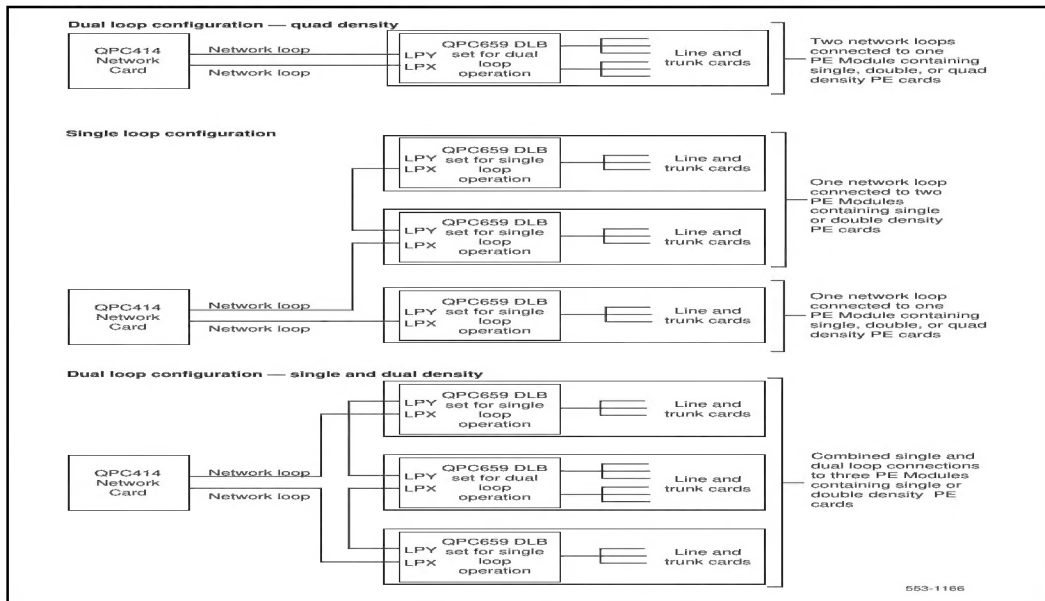
- 1** In the front of the pedestal, set the blower unit circuit breaker, or power switch, to OFF.
 - The red LED at the top front of the column should light.
 - The system terminal should display PWR0006 and BSD090.
- 2** Set the blower unit circuit breaker, or power switch, to ON.
 - The column LED should go out.
 - The system terminal should display PWR0046.
- 3** Use a screwdriver to loosen the retaining screws at the front of the blower unit (see [Figure 127](#)) and pull the unit out until it is disconnected from the pedestal.

Note: Do *not* pull the unit all the way out of the pedestal.

 - The column LED should light.
 - The system terminal should display PWR0006 and BSD090.
- 4** Reinstall the blower unit and tighten the retaining screws.
 - The column LED should go out.
 - The system terminal should display PWR0046.
- 5** Heat one of the two thermal sensors under the top cap of the column with a hand-held hair dryer or similar heat source.
 - The column LED should light.
 - Thirty seconds after the thermal sensor detects 70 degrees C (158 degrees F), the main circuit breaker, or the blower unit circuit breaker, at the rear of the pedestal should trip. The system terminal should display PWR0004, PWR0006, and PWR0007.

- 6 Allow the sensor to cool, then reset the circuit breaker in the pedestal. If a sysload occurs, allow it to complete.
 - The column LED should go out.
 - The system terminal should display PWR0044, PWR0046, and PWR0047.
- 7 Repeat steps 5 and 6 for the other thermal sensor.

Figure 127
Blower unit removal



Sysload test

Use this procedure to test the sysload (manual reload) function.

1 Start the sysload:

- **On options 21A and 21**, press the reload (Rld) button on the QPC687 CPU Card.
- **On option 21E**, press the Rld button on the NTND01 ICM Card.
- **On option 51**, press the Rld button (the bottom button) on the single NTND10 CMA Card (QPC581 before X11 release 18).
- **On option 51C**, press the Man Rst button (the bottom button) on the NT6D66 (or NT9D19) Call Processor Card.
- **On options 61 and 71**, simultaneously press the Rld buttons (the bottom buttons) on both NTND10 CMA Cards (QPC581 before X11 release 18).
- **On options 61C, 81, and 81C**, simultaneously press the Man Rst buttons (the bottom buttons) on both NT6D66 (or NT9D19) Call Processor Cards.

The following functions occur during a sysload:

- **On all system options:**

The red LED at the top of the CPU column should light.

The major alarm indication should be displayed on all attendant consoles.

The LED on the front of the disk drive unit should light. (In options 51C, 61C, 81, and 81C, the LED on only one of the disk drive units will light.)

- **On options 21A and 21:**

The display on the faceplate of the QPC742 FDI Card should indicate the status of the disk drive unit.

A series of codes should be displayed on the faceplate of the NT8D19 Memory/Peripheral Signaling Card.

- **On option 21E:**

The display on the faceplate of the QPC742 FDI Card should indicate the status of the disk drive unit.

A series of codes should be displayed on the NTND01 ICM and NTND02 MSPS Cards.

- **On options 51, 61, and 71:**

The display on the faceplate of the QPC584 MSI or QPC742 FDI Cards should indicate the status of the disk drive unit.

The LEDs on the QPC583 or NTND09 Memory Cards should flash as memory checks take place.

A series of codes should be displayed on the QPC580 CPU Interface Card.

- **On options 51C, 61C, 81, and 81C:**

The faceplate HEX displays on the NT5D20 IOP/CMDU Card(s) should show a steady "A" with flashing decimal points when the card(s) complete a self-test.

On the LCD displays on the NT6D66 (or NT9D19) CP Card(s):

Following the "Selftest Complete" message, watch the LCD for the message "IOP in Slot 17."

Watch the LCD for the message "Loading Disk OS."

When the sysload is complete, the system terminal displays DONE and the system automatically invokes the initialization program.

The following functions occur when the initialization is complete:

- The column LED should go out.
- The major alarm indication should disappear from all attendant consoles.
- The system automatically runs the programs in the midnight routine.

- 2 Press the return key on the system terminal to monitor the progress of the midnight routines until the OVL111 BKGD response is received.

System terminal and system monitor test

Use this procedure to test system terminals connected to the Meridian 1.

- 1 Log into the system:

LOGI (password)

- 2 Enter the program and check the status of the system monitor:

LD 37

STAT XSM

- 3 Test the terminal:

TTY x “x” is the device number assigned to the system terminal

The system terminal should display

ABCDEFGHIJKLM

NOPQRSTUVWXYZ

%*!&()<>=:,.?

READY FOR INPUT

- 4 Step through the keys on the keyboard one at a time. All keyboard input should be echoed until END is entered.

- 5 Exit LD 37:

PFTU test

Use this procedure to test a PFTU and its interface with the system monitor.

- 1 Set the line transfer switch on the PFTU to BYPASS. Associated attendant consoles should display a major alarm.
- 2 Set the line transfer switch on the PFTU to NORMAL.
- 3 Set the line transfer switch on the attendant console associated with the PFTU to ON. Associated attendant consoles should display a major alarm.
- 4 Set the line transfer switch on the attendant console associated with the PFTU to OFF. The “major” alarm condition displayed on attendant consoles associated with the PFTU should disappear.
- 5 Repeat Steps 2 and 3 for each attendant console associated with the PFTU.
- 6 Set the line transfer switch on the PFTU to BYPASS and test the telephones and trunks connected to the PFTU.
 - Place an outgoing call from each telephone associated with the PFTU. Each telephone should be connected directly to a trunk.
 - Place an incoming call on each trunk associated with the PFTU. Each trunk should be connected directly to a telephone.
- 7 Set the line transfer switch on the PFTU to NORMAL and test the telephones and trunks connected to the PFTU. The telephones and trunks associated with the PFTU should return to normal operation.

Disk drive unit test

Use this procedure to test the FDU, MDU (for other than options 51C, 61C, 81, and 81C) or SMDU.

- 1 Log into the system:
LOGI (password)
- 2 Enter the program:
LD 37
- 3 Make sure the disk drive unit is not disabled:
STAT MSI

- 4 If the disk drive unit is disabled, enable it:

ENL MSI 0

- 5 Test the disk drive unit:

MSI 0

If the system response is not “OK,” see the *X11 input/output guide* for the meaning of the message received.

- 6 Exit LD 37:

Use this procedure to test the CMDUs in options 51C, 61C, 81, and 81C.

- 1 Log into the system:

LOGI (password)

- 2 Enter the program:

LD 137

- 3 Make sure the CMDU to be tested is not disabled:

STAT CMDU checks the status of both CMDUs

- 4 If the CMDU to be tested is disabled, enable it:

ENL CMDU x x represents the number for the specific CMDU

- 5 Test the CMDU:

TEST CMDU

If the system response is not “OK,” see the *X11 input/output guide* for the meaning of the message received.

6 Exit LD 137:

7 To test the second CMDU, enter

LD 135

Switch CPUs:

SCPU

Repeat steps 1 through 6.